

Comparisons of Job Characteristics

Focus Occupation: Air Traffic Controllers (53-2021)

Associated Occupation: Commercial Pilots (53-2012)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Air Traffic Controllers (53-2021)
Associated Occupation: Commercial Pilots (53-2012)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Transportation	4.6	18.7	20.1	0	Current knowledge level may be sufficient
Mechanical	6.8	14.6	2.7	<<	Extensive education and/or training may be required
Geography	3.9	14.4	11.0	<<	Extensive education and/or training may be required
Mathematics	9.2	13.4	7.3	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	12.2	11.1	0	Current knowledge level may be sufficient
Physics	4.3	10.9	6.8	<<	Extensive education and/or training may be required
Telecommunications	3.9	8.8	8.4	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 61

Focus Occupation: Air Traffic Controllers (53-2021)
Associated Occupation: Commercial Pilots (53-2012)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	17.7	5.3	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	15.0	10.8	<<	Extensive development of skills in this area may be required
Critical Thinking	10.8	13.6	14.3	0	Current skill level may be sufficient
Judgment and Decision Making	9.4	12.2	15.6	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 56			
Focus Occupation: Air Traffic Controllers (53-2021) Associated Occupation: Commercial Pilots (53-2012)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Control Precision	6.6	15.1	7.7	<<	Extensive improvement in abilities may be required
Far Vision	7.8	15.1	14.5	0	Current ability level may be sufficient
Near Vision	11.1	14.8	15.2	0	Current ability level may be sufficient
Response Orientation	4.0	13.9	2.7	<<	Extensive improvement in abilities may be required
Depth Perception	5.3	13.3	7.4	<<	Extensive improvement in abilities may be required
Time Sharing	6.6	10.4	17.8	>>	Current ability level is likely more than sufficient
Spatial Orientation	2.7	10.3	1.8	<<	Extensive improvement in abilities may be required
Glare Sensitivity	2.6	9.3	2.0	<<	Extensive improvement in abilities may be required
Night Vision	2.1	8.7	4.8	<<	Extensive improvement in abilities may be required
Peripheral Vision	2.2	8.5	1.8	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 85
Focus Occupation: Air Traffic Controllers (53-2021) Associated Occupation: Commercial Pilots (53-2012)		
Work Activities	Exclusivity of Activity	
Make decisions	24	
Perform safety inspections in transportation setting	62	
Read maps	42	
Read navigation charts	85	
Sustain attention in air traffic emergencies	92	
Understand English for aviation communications	89	
Understand technical operating, service or repair manuals	6	
Use aircraft safety regulations	85	
Use local or regional geographical knowledge to transportation	70	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 94

Focus Occupation: Air Traffic Controllers (53-2021)
Associated Occupation: Commercial Pilots (53-2012)

Tools and Technologies	Exclusivity
Aerospace location and navigation systems and components	70
Air transportation support systems and equipment	51
Computers	1
Flight communications related systems	70
Industry specific software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.